

SECRET

Approved for Release 2000/04/17 : CIA-RDP78B04560A006100010007-4

25X1C

PHOTOGRAPHIC INTERPRETATION REPORT

SUPPLEMENT



SOUTHEAST ASIA ACTIVITY REPORT

SELECTED RADAR SITES

NORTH VIETNAM

NPIC/R-167/67

OCTOBER 1967

Approved for Release 2000/04/17 : CIA-RDP78B04560A006100010007-4

GROUP 1 EXCLUDED FROM
AND DECLASSIFICATION

WARNING

This document contains information affecting the national defense of the United States, within the meaning of Title 18, sections 793 and 794, of the U.S. Code, as amended. Its transmission or revelation of its contents to or receipt by an unauthorized person is prohibited by law.

NOTICE

This is the third in a series of updated and supplementary items to be inserted in NPIC/R-32/67, *Southeast Asia Activity Report, Selected Radar Sites, North Vietnam*. Items listed as negated should be deleted from the report.

Attached is a separate supplement, R-167/67, which follows the same basic format as R-32/67, and contains only that information which cannot be published at the CONFIDENTIAL level. If items from the supplement are inserted in R-32/67, the overall classification will be the same as R-167/67. The supplement cover should be used for any combination of these two reports.

Supplementary Items

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|---------|------------------------------------|
| A-28(S) | Xom Ngoai AW/GCI Facility* |
| A-30(S) | Ngan Son AW/GCI Facility* |
| A-32(S) | Hai Phong AW/GCI Facility* |
| A-34 | Xom Lom (Moc Chau) AW/GCI Facility |

Updated Items

- | | |
|---------|--|
| A-10(S) | Thuong Che AW/GCI Facility* (Updates Pages A-10 and 11 in R-32/67) |
|---------|--|

Addenda

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- | | | |
|----------|--|-------|
| A-6, 7 | Change site designation from Phuc Yen to Dong Lai (Phuc Yen). | |
| A-8, 9 | Change site designation from Tang My to Ha Noi (Tang My). | |
| A-14 | Add BE No [REDACTED] | 25X1A |
| B-4, 5 | Change site designation from Thuan Ton to Ha Noi (Thuan Ton). | |
| B-14, 15 | Change site designation from Duc Noi to Ha Noi (Duc Noi). | |
| B-22 | Add BE No [REDACTED] | 25X1A |
| B-30 | Add BE No [REDACTED] | |
| B-38, 39 | Change site designation from Yen Vinh to Dong Thap (Yen Vinh) and add BE No [REDACTED] | |

25X1A

*This item is reported in R-167/67.

INTRODUCTION

This report is an NPIC study designed to present an overall view of the radar facilities in North Vietnam. It is not all-inclusive, since it will contain only those sites which have been observed on aerial photography. Fire control radar for antiaircraft or missiles will not be reported.

Updated and supplementary items will be disseminated periodically under NPIC/R-32/67 and should be inserted in this report. A separate supplement, R-167/67, will also be disseminated; however, it will be keyed to the original report and will contain only that information which cannot be published at the CONFIDENTIAL level.

The study is divided into 4 categories:

CATEGORY A. Air Warning/Ground Controlled Intercept (AW/GCI). These are multiple radar sites which contain a variety of electronic equipment and have a capability for the determination of the range, bearing, altitude, and identification, friend or foe (IFF) of aircraft. However, all sites which include a TOKEN-type or BAR LOCK-type radar will be included in this category even if associated height-finding or IFF radar cannot be identified.

CATEGORY B. Air Search. These are normally singly deployed radars which have either limited or no heightfinding capability. Acquisition radars which are associated with AAA or SAM sites will not be reported.

CATEGORY C. Surface Search. These radars are normally deployed on high ground along the coast or on offshore islands and are used to locate and track shipping.

CATEGORY D. Ground Controlled Approach (GCA). These radars are located at airfields and provide an all-weather capacity.

The introduction to each of the categories contains a table of contents and a small-scale plot map. A photographic analysis of the referenced photography, a large-scale plot map, and a photograph are provided for each item.

The type of photography utilized in this report limits mensuration; therefore, all measurements are necessarily approximate.

Since most radar equipment in North Vietnam is mobile and may be readily moved from one location to another, sites will not be deleted from the report and no attempt will be made to report the current operational status of any radar site.

Electronic order-of-battle publications are frequently keyed to a number which is identical to the last part of the BE number and should be consulted for the current status of radar sites.

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CATEGORY A

Air Warning/Ground Controlled Intercept

The North Vietnamese employ a single TOKEN-type radar (usually BAR LOCK or BIG BAR) and a single heightfinder (normally SIDE NET or ROCK CAKE/STONE CAKE) for air warning/ground controlled intercept (AW/GCI). This is not in accordance with the Soviet practice of providing several similar back-up radars at AW/GCI sites.

The North Vietnamese usually attempt to conceal their GCI sites to protect them from US air strikes; however, well defined sites, such as Thuy Ha (page A-22), have also been constructed.

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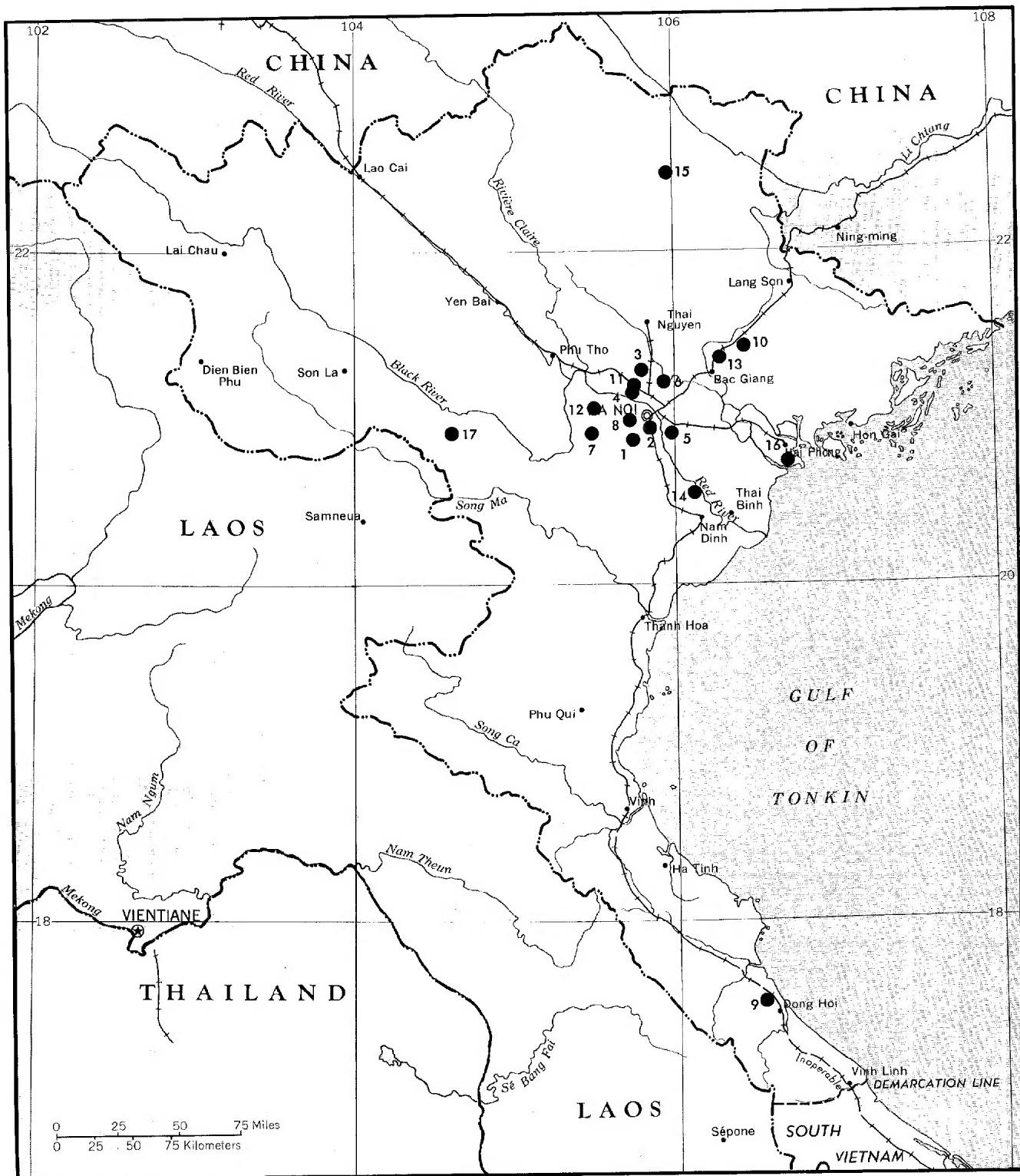
TABLE OF CONTENTS CATEGORY A

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2		Hanoi/Bac Mai AF	A-4
3		Dong Lai (Phuc Yen)	A-6
4		Ha Noi (Tang My)	A-8
5		Thuong Che*	A-10(S)
6		Phuc Yen ENE (Duc Hau)	A-12
7		Nui Vien Nam	A-14
8		Ha Dong	A-16
9		Xom Phuong	A-18
10		Kep	A-20
11		Thuy Ha	A-22
12		Son Tay (Chieu Dong)	A-24
13		Quang Mo	A-26
14		Xom Ngoai*	A-28(S)
15		Ngan Son*	A-30(S)
16		Hai Phong*	A-32(S)
17		Xom Lom (Moc Chau)	A-34

25X1A

*This facility is reported in R-167/67.

CATEGORY A



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25X1C NPIKAR 22/67
10/08/1967

25X1A

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[REDACTED]
BE NUMBER

[REDACTED]
UTM COORDINATES

20-52N 104-36E
GEOGRAPHIC COORDINATES

NAME: XOM LOM (MOC CHAU) AW/GCI FACILITY

LOCATION: 2.0 NM NW OF MOC CHAU

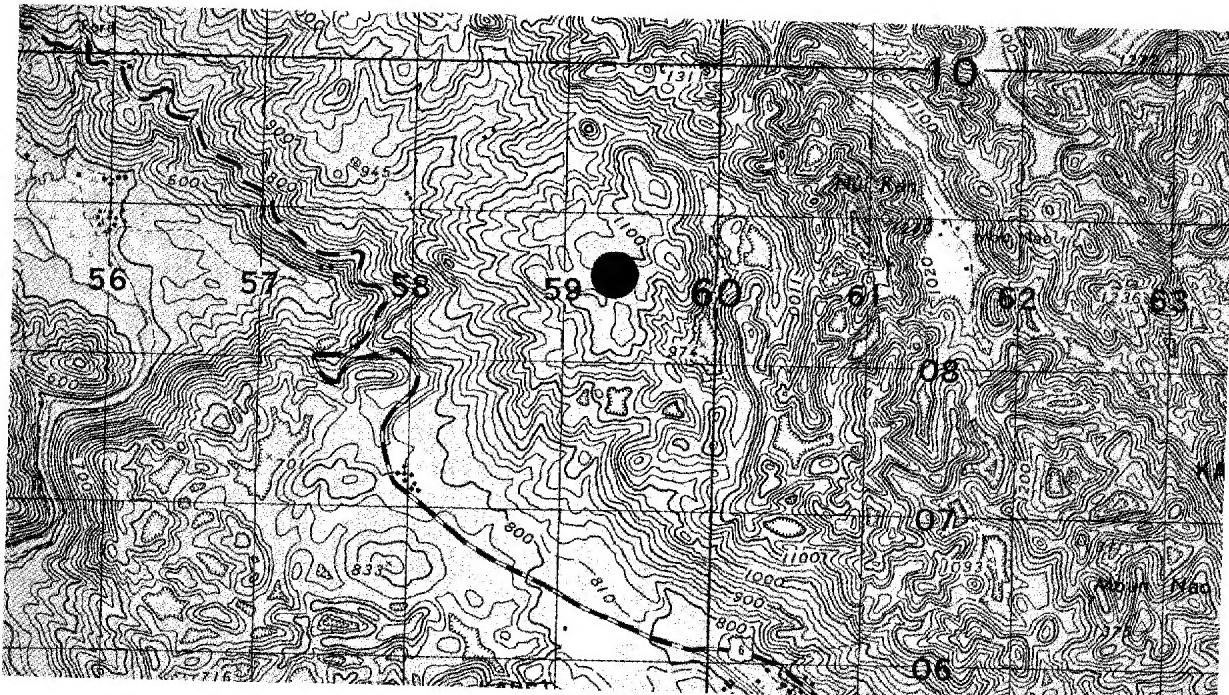
DESCRIPTION: FACILITY CONSISTS OF 1 BIG BAR RADAR, 1 SIDE NET RADAR, AND AT LEAST 2 VAN TRAILERS.

A PROBABLE SUPPORT AREA IS LOCATED NEARBY.

25X1D

PHOTO REFERENCES: [REDACTED]

MAP REFERENCES: AMS SERIES L7014, SHEET 5950-IV, 1ST ED, 1965 (U)
AMS SERIES 1501, SHEET NF 48-14



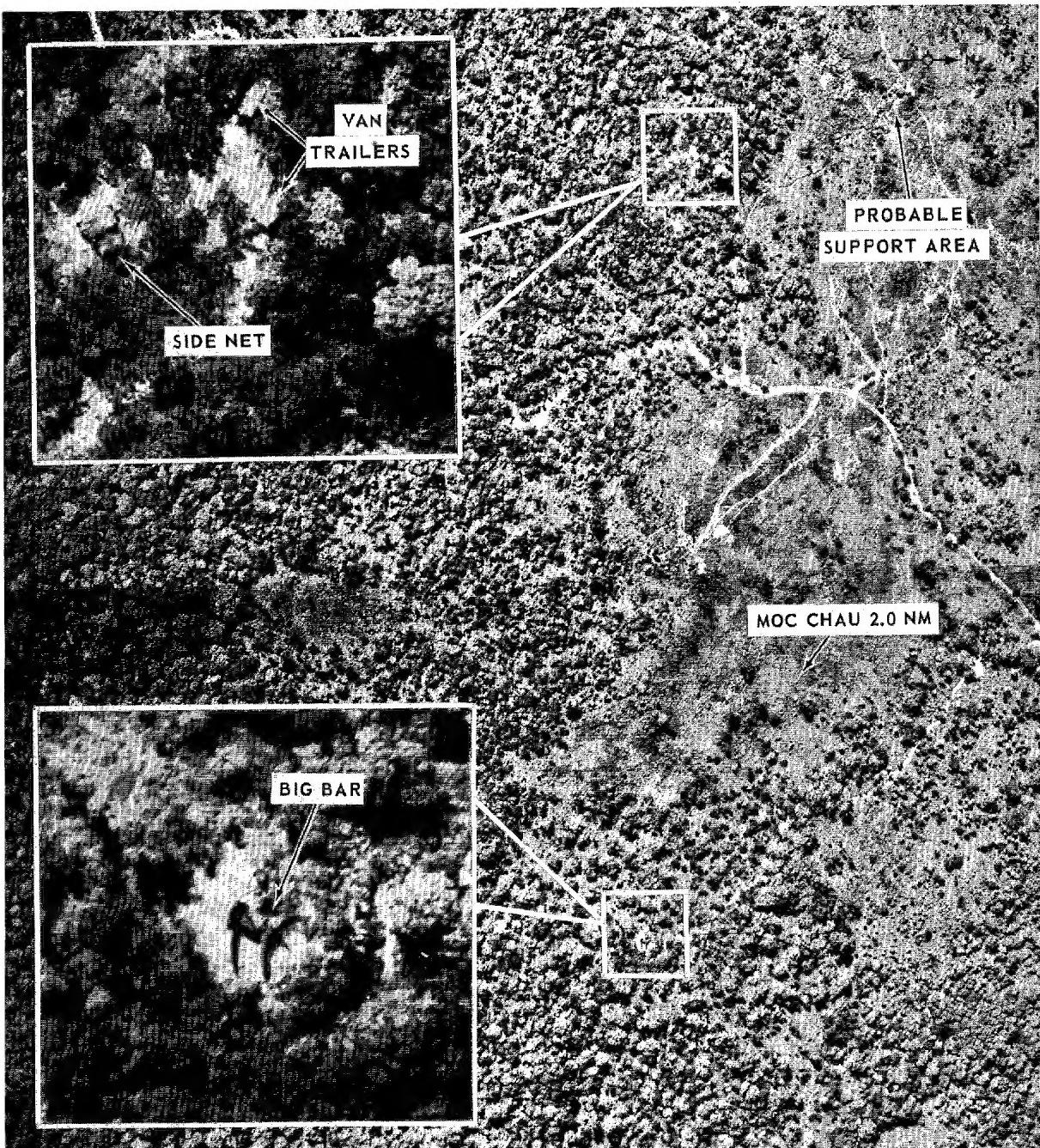
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NPIC/R-32/67
OCTOBER 1967

XOM LOM (MOC CHAU) AW/GCI FACILITY

25X1D

UTM COORDINATES

20-52N 104-36E
GEOGRAPHIC COORDINATES



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CATEGORY B

Air Search

Most North Vietnamese air search radar sites consist of 2 vehicle revetments and a hut or shelter. When the site is occupied, a radar (usually FLAT FACE or KNIFE REST) will be in one revetment and a generator will be in the other revetment.

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<u>Map Key</u>	<u>BE No</u>	<u>Name</u>	<u>Page</u>
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4		Bai Thuong	B-8
5		Vinh Son	B-10
6		Phu Tho	B-12
7		Ha Noi (Duc Noi)	B-14
8		Ha Noi/Gia Lam	B-16
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10		Badon	B-20
11		Hai Phong	B-22
12		Bach Long Vi	B-24
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14		My Duc	B-28
15		Tien Yen	B-30
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18		Cua Lo	B-36
19		Dong Thap (Yen Vinh)	B-38
20		Phuc Yen SE Noi Bai	B-40
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SON TAY AW/GCI FACILITY (CHIEU DONG)	2104N 10532E	A-24
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HA NOI (TANG MY) AW/GCI FACILITY	2110N 10547E	A-8
THUY HA AW/GCI FACILITY	2110N 10548E	A-22
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INTRODUCTION

This report contains new and updated items supplemental to NPIC/R-32/67, Southeast Asia Activity Report, Selected Radar Sites, North Vietnam. It follows the same basic format as the original report and contains only those pages which cannot be published at the CONFIDENTIAL level.

LIST OF EFFECTIVE PAGES

Page	Name	Date
i	Introduction	Oct 67
iii	List of Effective Pages	Oct 67
A-10, 11(S)	Thuong Che	Oct 67
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A-32, 33(S)	Hai Phong	Oct 67

25X1A

25X1D

[REDACTED]
BE NUMBER

[REDACTED]
UTM COORDINATES

20-58N 105-58E
GEOGRAPHIC COORDINATES

NAME: THUONG CHE AW/GCI FACILITY

LOCATION: IMMEDIATELY WEST OF THUONG CHE AND 6.4 NM NE OF HANOI/GIA LAM AIRFIELD

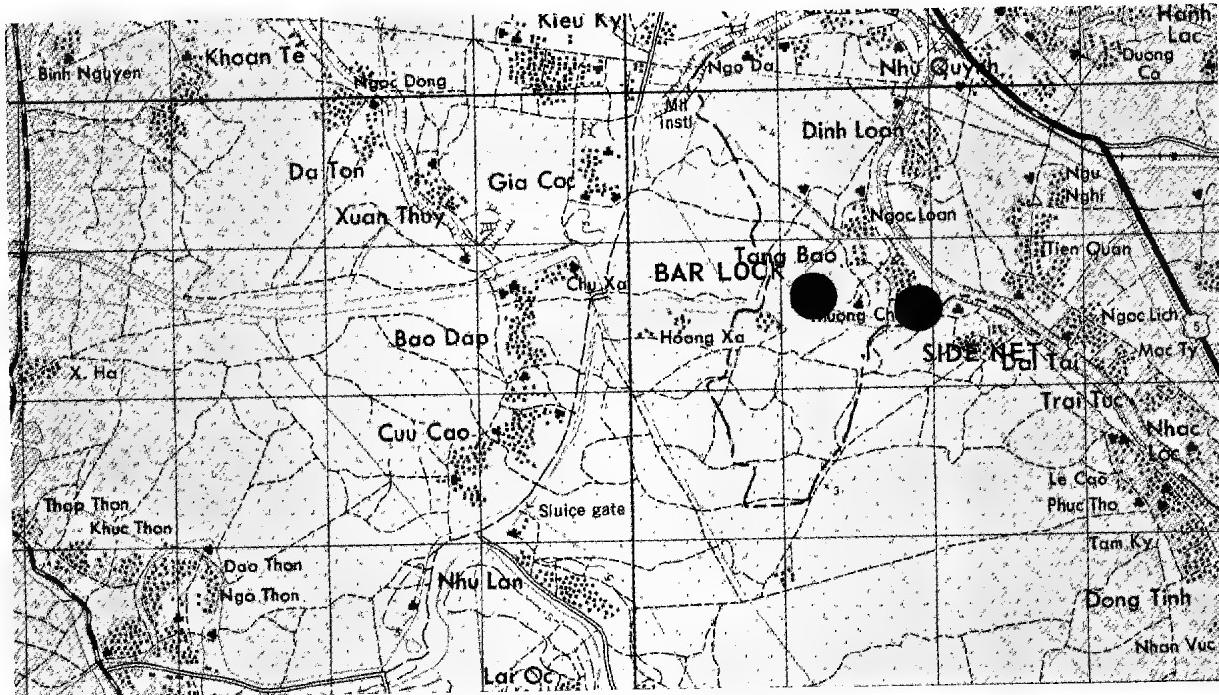
DESCRIPTION: FACILITY CONSISTS OF A BAR LOCK RADAR ON A MOUND WITH 2 VAN TRAILERS, 1 VAN TRUCK, AND 1 UNIDENTIFIED VEHICLE, ALL OF WHICH ARE REVETTED AND CAMOUFLAGED.

A SIDE NET RADAR AND A MOUND WITH 2 UNREVETTED VAN TRAILERS IS LOCATED APPROXIMATELY 600 YDS EAST OF THE BAR LOCK.

25X1D

PHOTO REFERENCES: [REDACTED]

MAP REFERENCES: AMS SERIES L7014, SHEET 6150-1, 1ST ED, 1965 (U)
AMS SERIES 1501, SHEET NF 48-15



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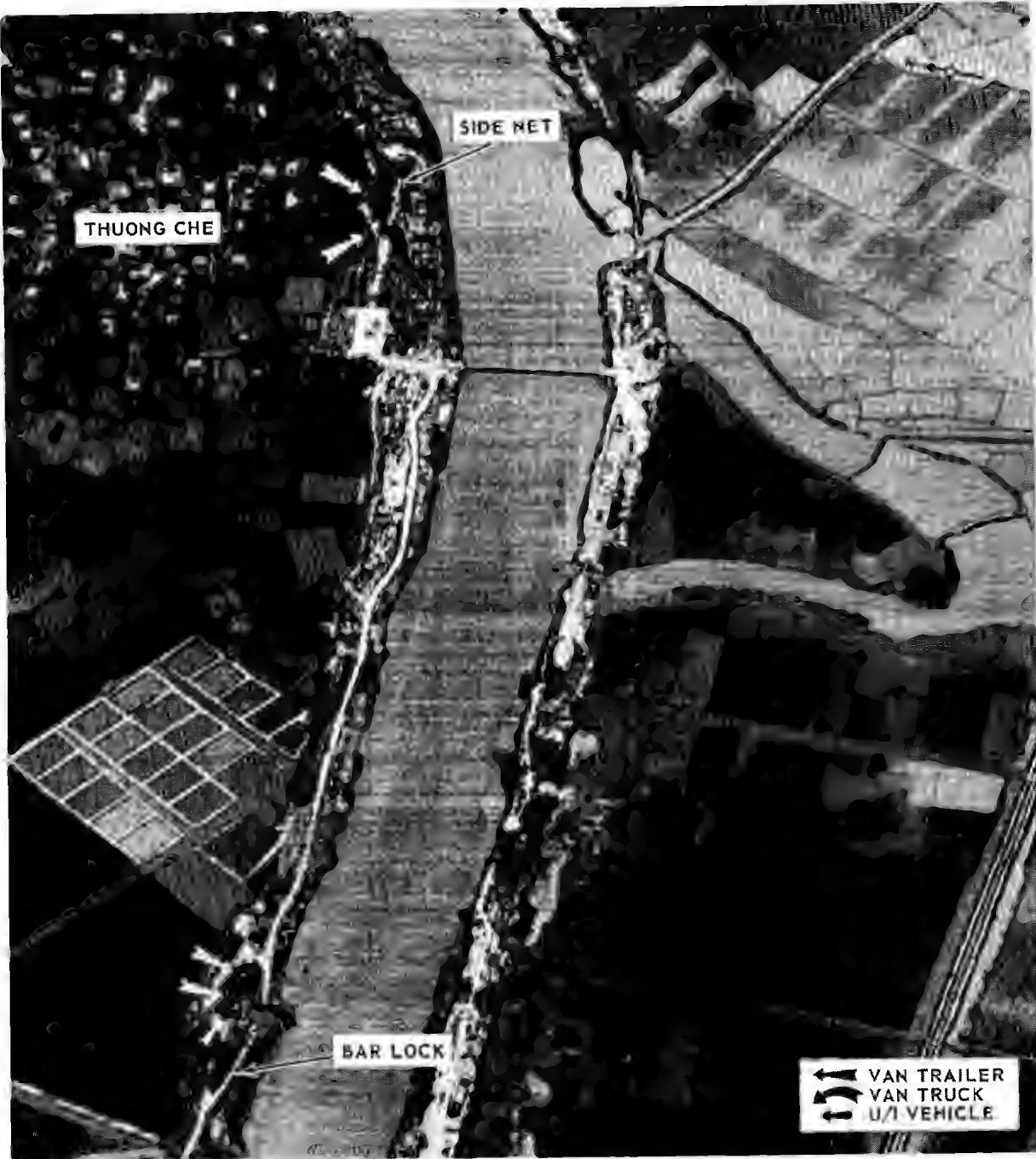
25X1D

THUONG CHE AW/GCI FACILITY

20-58N 105-58E

UTM COORDINATES

GEOGRAPHIC COORDINATES



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BE NUMBER

UTM COORDINATES

20-36N 106-02E
GEOGRAPHIC COORDINATES

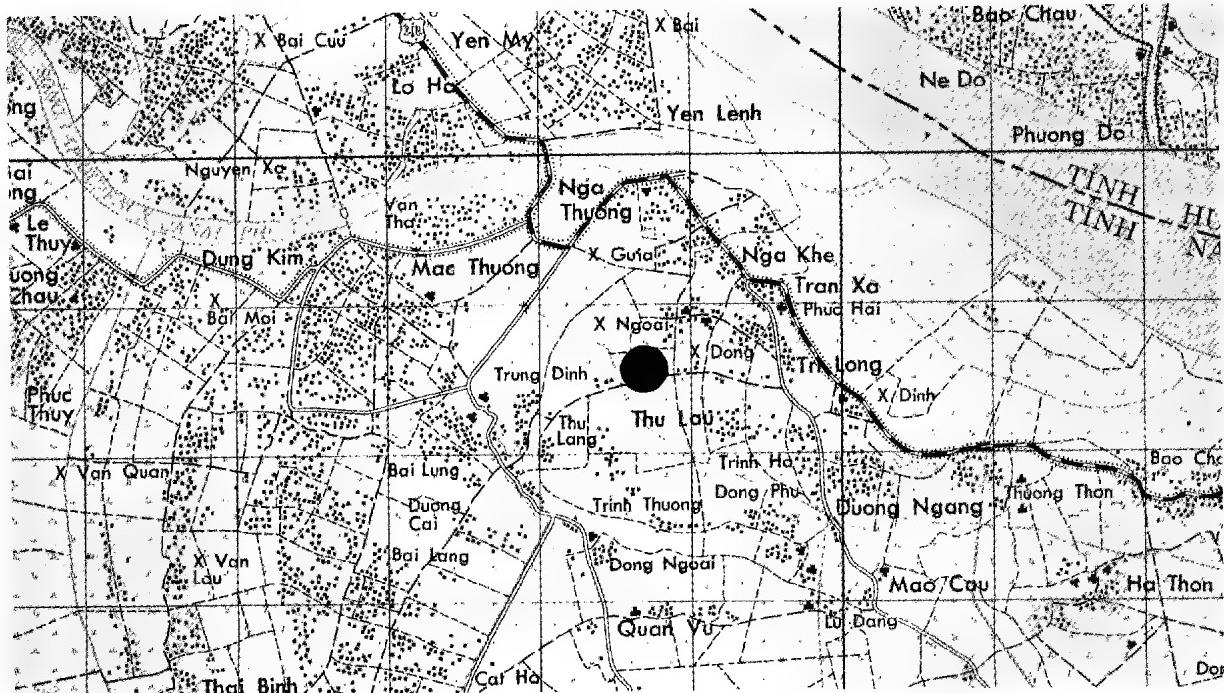
NAME: XOM NGOAI AW/GCI FACILITY

LOCATION: IMMEDIATELY SW OF XOM NGOAI AND 2.5 NM SW OF HUNG YEN

DESCRIPTION: FACILITY CONSISTS OF A RADAR MOUND AND 3 VEHICLE REVETMENTS.
TWO ADDITIONAL REVETMENTS ARE LOCATED NEARBY.

25X1D

PHOTO REFERENCES: [REDACTED]

MAP REFERENCES: AMS SERIES L7014, SHEET 6250 III, 1ST ED, 1965
AMS SERIES 1501, SHEET NF 48-15

A-28(S)

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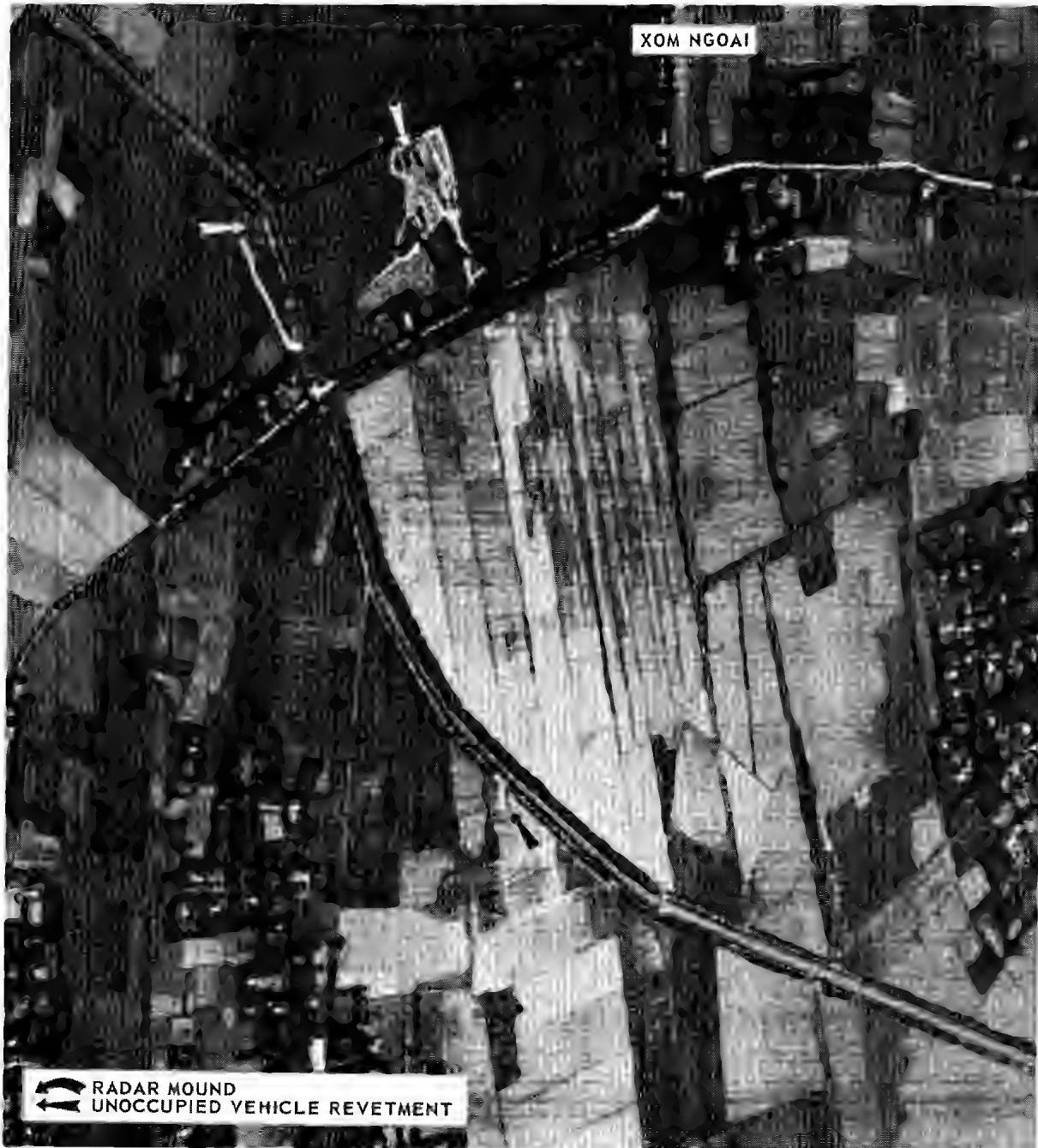
NPIC/R-167/67

25X1D

XOM NGOAI AW/GCI FACILITY

UTM COORDINATES

20-36N 106-02E
GEOGRAPHIC COORDINATES



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A-29(S)

25X1C

SECRET

NPIC/R-167/67
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25X1D

25X1A

BE NUMBER

UTM COORDINATES

22-25N 105-57E
GEOGRAPHIC COORDINATES

NAME: NGAN SON AW/GCI FACILITY

LOCATION: 2.9 NM WEST OF NGAN SON AND 25.5 NM SW OF CAO BANG

DESCRIPTION: FACILITY CONSISTS OF A TOKEN-TYPE RADAR (PROBABLY BIG BAR), 2 REVETTED VAN TRAILERS, 1 REVETTED VAN TRUCK, AND 7 SUPPORT BUILDINGS. A POSSIBLE RADAR POSITION UNDER CONSTRUCTION, [REDACTED] AND AN EMPTY REVETMENT ARE ADJACENT TO THE SITE.

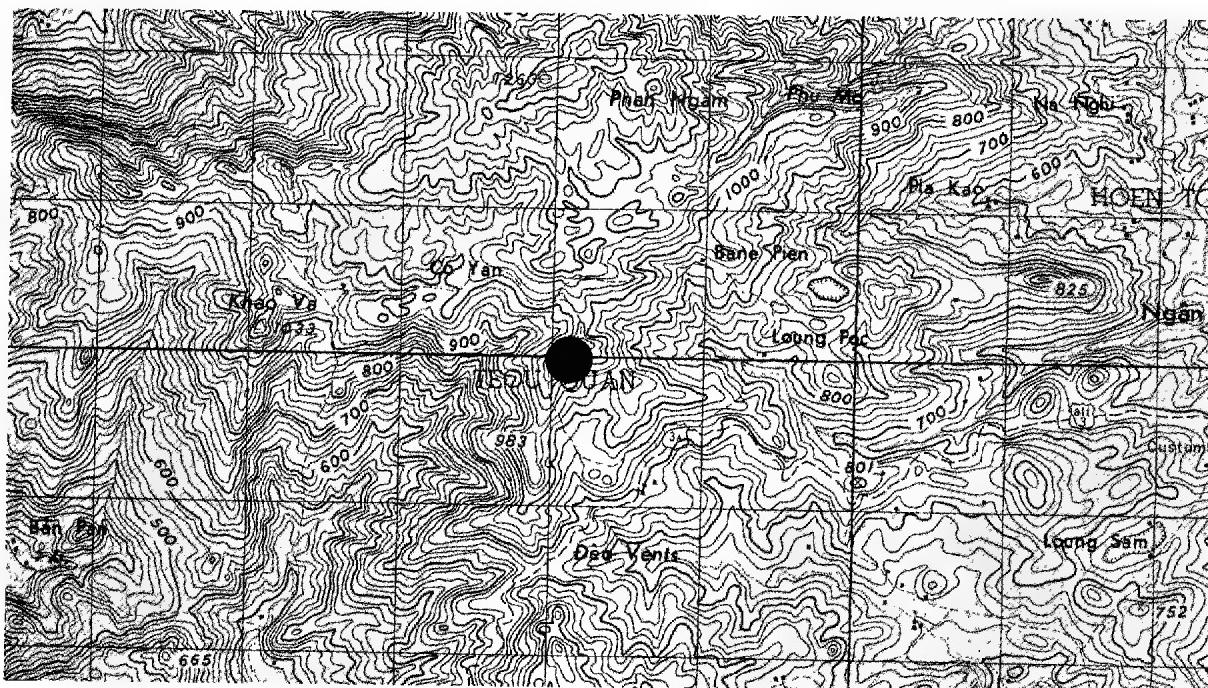
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THREE VAN TRAILERS, 1 CARGO TRUCK WITH A POSSIBLE TRAILER, AND 2 UTILITY TRUCKS ARE OBSERVED IMMEDIATELY SE OF THE SITE, ON ROUTE 3A AT ITS JUNCTION WITH THE ACCESS ROAD.

25X1D

PHOTO REFERENCES:

MAP REFERENCES: AMS SERIES L7014, SHEET, 6153-1, 1ST ED, 1965 (U)
AMS SERIES 1501, SHEET NF 48-7



A-30(S)

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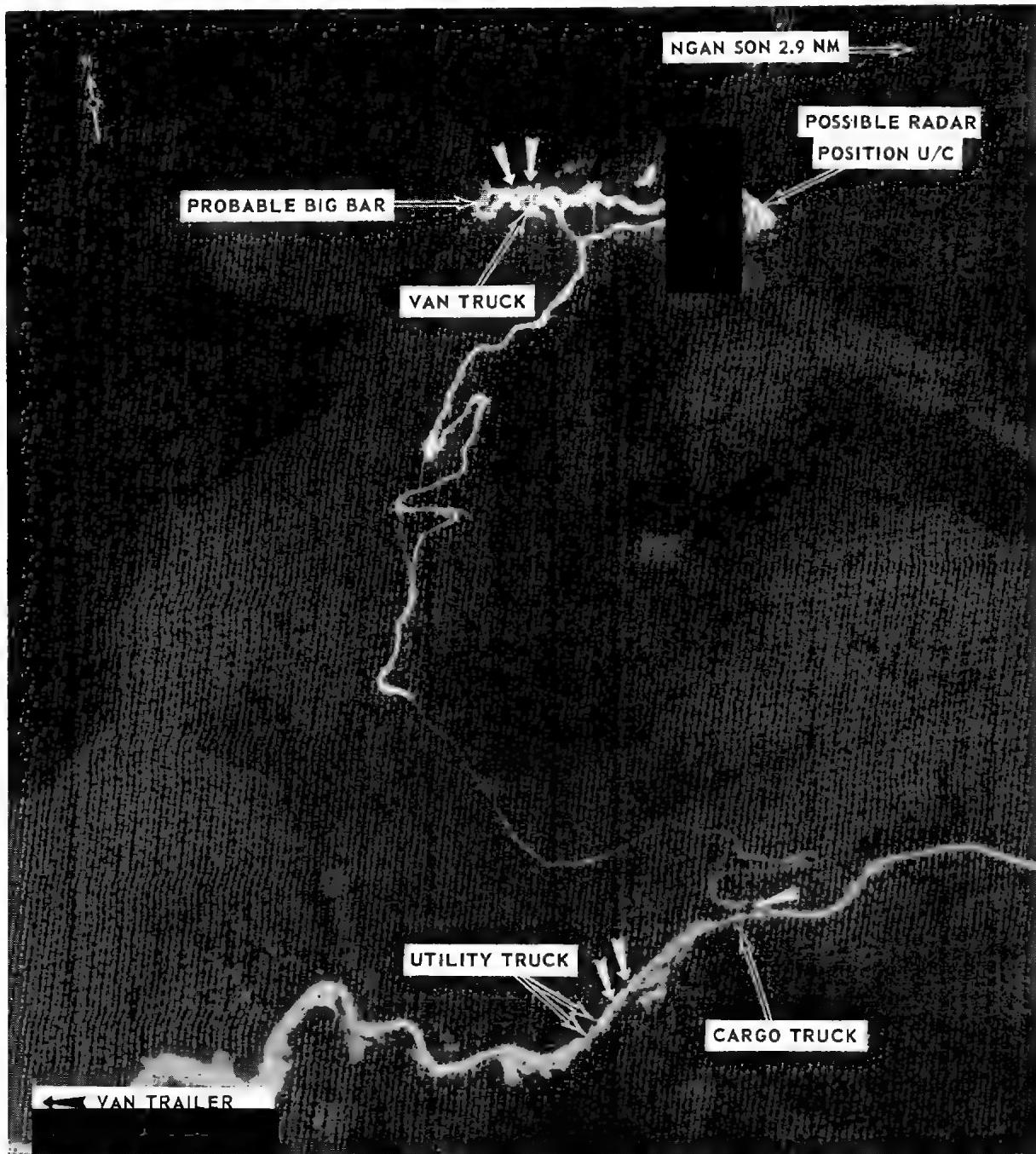
25X1D

NGAN SON AW/GCI FACILITY

UTM COORDINATES

22-25N 105-57E

GEOGRAPHIC COORDINATES



25X1D

A-31(S)

25X1A

25X1D

[REDACTED]
BE NUMBER

[REDACTED]
UTM COORDINATES

20-45N 106-41E
GEOGRAPHIC COORDINATES

NAME: HAI PHONG AW/GCI FACILITY

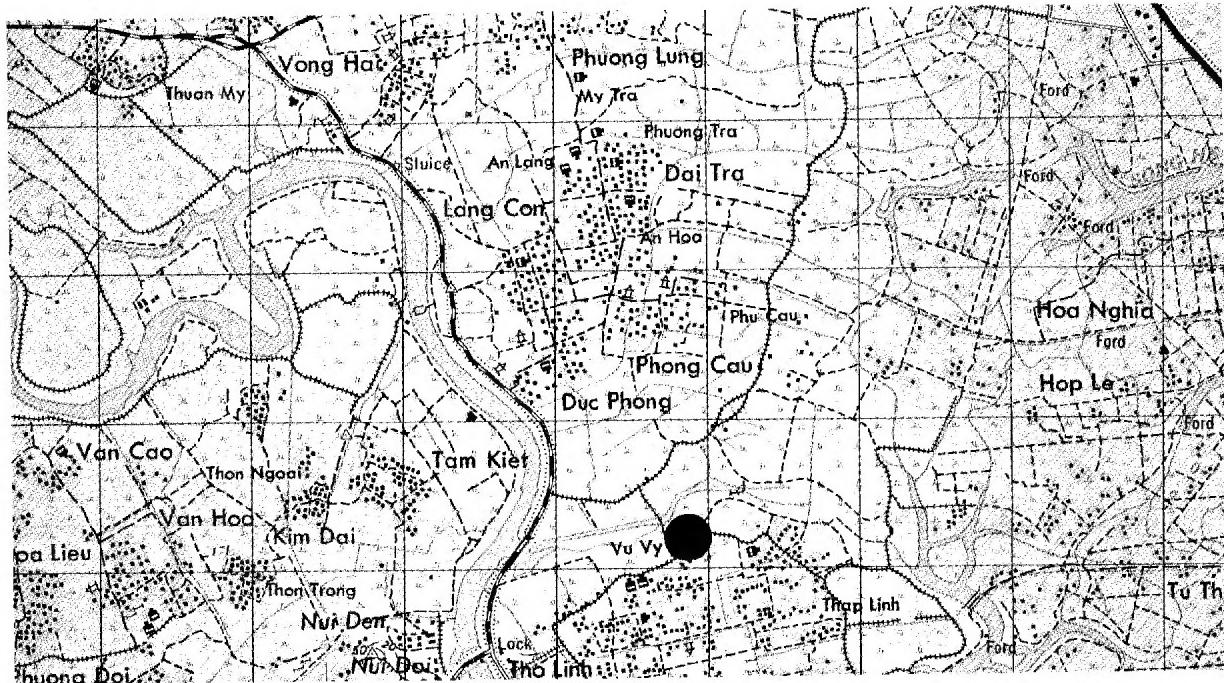
LOCATION: 6.4 NM SOUTH OF HAI PHONG

DESCRIPTION: FACILITY CONSISTS OF A PROBABLE BAR LOCK RADAR ON A MOUND WITH A REVETTED VAN TRUCK AND 4 UNIDENTIFIED VEHICLES; A REVETTED POSSIBLE FLAT FACE RADAR WITH A GENERATOR TRAILER; AND A RADAR POSITION WITH 2 UNIDENTIFIED VEHICLES ON A MOUND, 1 OTHER UNIDENTIFIED VEHICLE, AND A REVETTED VAN TRUCK.

25X1D

PHOTO REFERENCES: [REDACTED]

MAP REFERENCES: AMS SERIES L7014, SHEET 6350-IV, 1ST ED, 1965 (U)
AMS SERIES 1501, SHEET NF 48-16



A-32(S)

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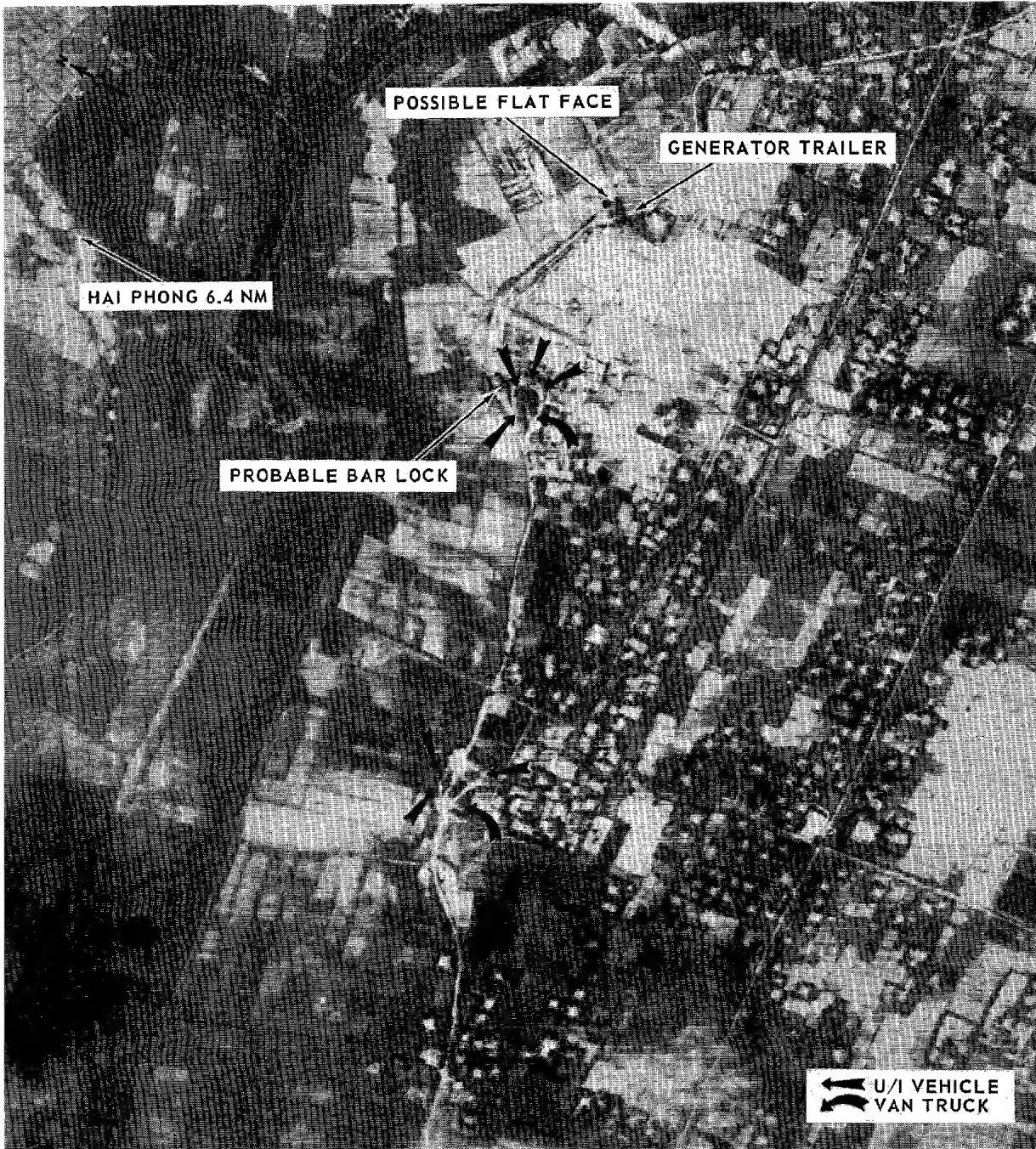
OCTOBER 1967

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HAI PHONG AW/GCI FACILITY

UTM COORDINATES

20-45N 106-41E
GEOGRAPHIC COORDINATES



A-33(S)

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TITLE NPIC

R-167-67 SUPPL.

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